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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/509,872	09/11/2000	Ian H. Duncan	98784-US	1351
23553 7590 05/30/2007 MARKS & CLERK P.O. BOX 957 STATION B OTTAWA, ON K1P 5S7 CANADA			EXAMINER NGUYEN, STEVEN H D	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

5

Office Action Summary	Application No. 09/509,872	Applicant(s) DUNCAN ET AL.	
	Examiner Steven H.D Nguyen	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS; WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-8 and 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuasa (USP 6085238) in view of Dobbins (USP 5825772) and Dunne (USP 5845091).

Yuasa discloses a method and system for forwarding packets comprising incoming and output service interfaces providing service to multiple distinct and isolated user networks (Fig 14 has the networks H1 and H2 or Fig 18-19, 21-22, 25, 28-30, 32, 37, 41, 45, 58, 62 which discloses a plurality of distinct and isolated user network and providing multiple protocols "MPOA, see col. 3, lines 15-25") for providing service for packet and frame levels, MPOA management function (Fig 33, Ref 247a, See col. 46, lines 46-67), ATM switch (Fig 33, Ref 203a, See col. 46, lines 46-67) and managed by a single provider (Fig 33, Ref Network

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Management agent) and the service interface related to physical and logical connections includes multiple traffic flows from ingress port (Fig 1, 31, 33, traffic flows such voice and data via ports 41, 2301 of the switch by using physical and logical connection; See col. 1, lines 29-33 and col. 2, lines 10-17); service interfaces supports realms each relating to a specific instance of internetworking service function being public internet access service (Fig 18, Ref 202, encapsulating, Ref 209, encryption for transmitting packet via internet). However, Yuasa fails to disclose the system with multiple forwarding rules based on the routing topology and policing information to each of said distinct and isolated user network; receiving the packets at one of incoming service interfaces; selecting an appropriate forwarding rule based on a source address in the packets and forwarding the packets to one of the output service interfaces based on a destination address in the packet and information in the said forwarding rules; the specific instance is VPN service being a bridged and/or routed and network layer connectivity service. However, in the same field of endeavor, Dobbins discloses the system with multiple access rules based on the routing topology and policing information relevant to each of said distinct and isolated user network (Fig 7 discloses a plurality of access rules based on routing topology and policy of the distinct and isolated network "VLAN or virtual private network", See col. 13, lines 48-59 and col. 17, lines 22-43); receiving the packets at one of incoming service interfaces (fig 7a, Ref 100, for receiving a data packet from an interface); selecting an appropriate access rule based on a source address in the packets and forwarding the packets to one of the output service interfaces based on a destination address in the packet and information in the said access rule (selecting a rule in order to forward a data packet, based on the source address, to an output interface, col. 17, lines 22-43); the specific instance is public internet access service (Fig 2, Ref

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10); the specific instance is VPN service being a bridged and/or routed and network layer connectivity service (col. 7, lines 48-58). However, Yuasa and Dobbins fail to disclose forwarding rules based on the routing topology and policing information relevant to each of said distinct and isolated user network; receiving the packets at one of incoming service interfaces; selecting an appropriate forwarding rule based on a source address in the packets and forwarding the packets to one of the output service interfaces, a decision as to which output service interface to forward the packets to being based on a destination address in the packet and information in said selected forwarding rule. In the same field of endeavor, Dunne discloses calculating the forwarding rules based on the routing topology and policing information relevant to each of said distinct and isolated user network (Fig 12, Router 1210, 1220-1222 includes a calculated forward lists for the sub-networks, See col. 2, lines 27-42, col. 3, lines 1 to col. 6, lines 15, the forward list is established based on routing topology, col. 4, lines 24-46) and policy information such priority, col. 6, lines 7-14,); receiving the packets at one of incoming service interfaces (Fig 13, Ref 1305); selecting an appropriate forwarding rule based on a source address in the packet and on the incoming service interface from which the packets are received (Fig 13, Ref 1305 the forwarding rule is selected by source address and implicitly discloses forwarding rule is selected by input interface which the packet is received) and forwarding the packets to one of the output service interfaces, a decision as to which output service interface to forward the packets to being based on a destination address in the packet and information in said selected forwarding rule (Fig 13, Ref 1310).

Since, Dobbins suggests a method and system for forwarding the packets between the source and destination station in virtual private group or non virtual private group in the internet

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using the security function between the distinct and isolated user networks and Yuasa discloses a system for forwarding the packets between the source and destination station in virtual private group in the ATM network by using MPOA for passing internet packet over ATM network for enhancing a security wherein the client address used to determine if the client is authorized to use the resource. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for selecting a forwarding rule based on the source address for forwarding the data packet as disclosed by Dunne's system into the access rule of Dobbins's system and Yuasa's system in order to provide a secure intra communication and redundant link between the networks.

Response to Arguments

3. Applicant's arguments filed 3/13/07 have been fully considered but they are not persuasive.

In response to pages 5-8, the applicant states that Dobbins fails to the forwarding rules based on routing topology and policy information relevant to each of the distinct and isolated network. Dobbins discloses a method and system for using the policy information such as open, one or both secure and don't care and the routing topology such as determined path for establishing an forward rule in order to forward or filter a frame that transit via a switch based on source address to a destination node which is coupled to a distinct isolated user networks such VLANs (See col. 13, lines 47-59 discloses after determining the frame can be forwarding to the destination node based on the policy as disclosed Fig 7; determining a path for forwarding the frame based on routing topology "path determined based on routing topology database"; Col. 17,

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discloses an access rule “filter or forward” is selected based on source address after destination address is resolved and establishing at least one path between the source and destination and Col. 4, lines 33-46 discloses a switch uses both source and destination address to forward or filter the frame). Thus Dobbins clearly discloses a method and system for selecting a forwarding rule “reads on an access rule “policing information” such as do not forward or forward and determining a path “reads on routing topology” based on routing topology to each of distinct and isolated user networks based on destination address in order to establish a routing table in order to forward the frame to a correct interface based on access policy “policing information” and routing topology “determined path” and Dunne discloses forwarding rule is selected to forward the packet to output port based on the source and destination address. Therefore, it would have been obvious to one of ordinary skill in the art to apply the forward rule “read on forward list” as disclosed by Dunne into the access rule of Dobbins and further apply these teachings into Yuasa. Furthermore, the applicant states that the examiner does not point out the route servers and edge forwarder. In reply, Dobbins discloses a route server for calculating the access rule (Fig 19, Ref 195) and edge forwarder (Fig 19, Ref 191) as stated in claim 8. furthermore, the applicant states that the forward rule of the application is different from the access rule and forward list of the reference. In reply, the forward rule is similar with the access rule and forward list because they used to forward the packets based on the information stored in it.

4. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Yuasa discloses a method for forwarding a packet via a networks; Dobbins discloses a method and system for forwarding the packet onto network based on the access rule and Dunne discloses a method and system for forwarding the packet based on the forward list "forward rule". Since, they are same field of endeavor; therefore, it would have been obvious to one of ordinary skill in the art to apply the teaching of Dunne into the teaching of Dobbins and apply these teaching into the teaching of Yuasa. The motivation would have been to provide a secure intra communication and redundant link between the networks.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

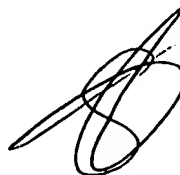
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H.D Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Welling Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, consisting of a stylized 'S' followed by a large loop and a final flourish.

Steven H.D Nguyen
Primary Examiner
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